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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,051	09/13/2005	Balbino Fernandez Garcia	3219	6985

7590 05/22/2007

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EXAMINER	
TRIEU, THAI BA	
ART UNIT	PAPER NUMBER
3748	

MAIL DATE	DELIVERY MODE
05/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/521,051	FERNANDEZ GARCIA, BALBINO	
	Examiner	Art Unit	
	Thai-Ba Trieu	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 April 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to the Amendment filed on April 09, 2007. Applicant's cooperation in correcting the informalities in the drawing and specification is appreciated. Applicant's cooperation in amending the claims to overcome the claim rejections relating to indefinite claim language is also appreciated.

Claims 1-5 were amended.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement thereof, since the recitations of ***"a first portion of the blades"*** and ***"a second portion of the blades"*** introduce new matter not supported by the original disclosure. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. See In re Daniels, 144F.3d 1452, 46 USPQ2d 1788 (Fed. Cir. 1998); In re Rasmussen 650 F.2d 1212, 211 USPQ 323 (CCPA 1981).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 and its dependent claims 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- In claim 1, the recitations of ***"a first portion of the blades"*** and ***"a second portion of the blades"*** render the claim indefinite, since it is not clear that which portion of the blade(s) is to be a first portion and which one is to be a second portion of the blade(s). Applicant is required to revise the claimed limitations.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b), with the absence of new subject matter, as being anticipated by Alessandri (Pub. Number EP 582 555 A1).

Alessandri discloses an explosion or internal combustion rotary engine, of the type structured by means of a cylindrical rotor (1) with radial housings for a plurality of blades (2) defining chambers (50) in a tubular stator (10), of generally cylindrical inner configuration, which is closed by means of end covers (Not Numbered) (See Figure 2), characterized in that the stator (10) includes an inner wall (100) of elliptical section, while the rotor (1) includes eight radial blades (2) properly interrelated such that the

retraction movement of part of them is combined with the ejection movement of the others in order for the mechanical relationship existing between them to determine that the same are kept in permanent contact with the inner wall (100) of the stator (10);

wherein said blades (q) include, in correspondence with their lower apexes, respective shafts (18) to which pairs of articulated connecting rods (40) are hingedly joined (at 41), with the special characteristic that four articulated connecting rods (40) are hingedly joined to four blades (2) at each end of the engine, configuring an articulated parallelogram, while another four blades (2) are hingedly joined to the other four blades (2), configuring a second articulated parallelogram, and such that these two parallelograms are angularly offset, each one of them affecting four blades in alternate arrangement with respect to the other four (See Figure 1); and

wherein said articulated connecting rods (40) are located in a pair of chambers established between the ends of rotor (1) and the covers (Not Numbered) closing the tubular body (10) constituting the stator (See Figures 1-2; Pages 2-4, lines 1-58, and Page 5, lines 1-10).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Drehkoben-Kraftmashinen (Patent Number DE 678,971), or Schobert (Patent Number 819,935), or Crutchfield (Patent Number 4,241,713, or Holdampf (Patent Number 4,711,268).

Drehkoben-Kraftmashinen discloses an explosion or internal combustion rotary engine, of the type structured by means of a cylindrical rotor with radial housings (Not

Numbered) for a plurality of blades defining chambers (Not Numbered) in a tubular stator, of generally cylindrical inner configuration, which is closed by means of end covers (Not shown), characterized in that the stator (Not Numbered) includes an inner wall (Not Numbered) of elliptical section, while the rotor (Not Numbered) includes eight radial blades (IV) properly interrelated such that the retraction movement of part of them is combined with the ejection movement of the others in order for the mechanical relationship existing between them to determine that the same are kept in permanent contact with the inner wall (Not Numbered) of the stator (Not Numbered) (See Figures 1-2).

Schobert discloses an explosion or internal combustion rotary engine, of the type structured by means of a cylindrical rotor with radial housings (I) for a plurality of blades (IV) defining chambers (Not Numbered) in a tubular stator, of generally cylindrical inner configuration, which is closed by means of end covers (Not shown), characterized in that the stator (I) includes an inner wall (Not Numbered) of elliptical section, while the rotor (III) includes eight radial blades (IV) properly interrelated such that the retraction movement of part of them is combined with the ejection movement of the others in order for the mechanical relationship existing between them to determine that the same are kept in permanent contact with the inner wall (Not Numbered) of the stator (I) (See Figure).

Crutchfield discloses an explosion or internal combustion rotary engine (10), of the type structured by means of a cylindrical rotor with radial housings (12) for a plurality of blades (38) defining chambers (41) in a tubular stator, of generally cylindrical inner configuration, which is closed by means of end covers (22, 23), characterized in that the stator (12) includes an inner wall (Not Numbered) of elliptical section, while the rotor (24) includes eight radial blades (38) properly interrelated such that the retraction movement of part of them is combined with the ejection movement of the others in order for the mechanical relationship existing between them to determine that the same are kept in permanent contact with the inner wall (Not Numbered) of the stator (12) (See Figures 1and 5-6, Column 2, lines 67-68, Column 3, lines 1-34).

Holdampf discloses an explosion or internal combustion rotary engine (10), of the type structured by means of a cylindrical rotor (14) with radial housings (12) for a plurality of blades (20) defining chambers (26) in a tubular stator, of generally cylindrical inner configuration, which is closed by means of end covers (22), characterized in that the stator (12) includes an inner wall (Not Numbered) of elliptical section, while the rotor (14) includes eight radial blades (20) properly interrelated such that the retraction movement of part of them is combined with the ejection movement of the others in order for the mechanical relationship existing between them to determine that the same are kept in permanent contact with the inner wall (Not Numbered) of the stator (12) (See Figures 1-2, Column 6, lines 7-27).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims and 5 are rejected under 35 U.S.C. 103(a), with the absence of the new subject matter, as being unpatentable over Alessandri (Pub. Number EP 582 555 A1), in view of Hunter (Patent Number 3,951,112).

Alessandri discloses the invention as recited above, and further discloses a spark plug (See Page 4, lines 24-25).

However, Alessandri fails to disclose the structural details of the blades and small recesses communicating the chambers adjacent to each blade when the latter passes by a spark plug.

Hunter teaches that it is conventional in the rotary internal combustion engine art, to utilize each blade (45) includes its recessed outer edge (49), configuring a groove as a channel in which a segment is coupled with freedom of movement, which constitutes a bridge of union between the blade (45) and the wall (23) of the stator (22) and which adopts a configuration as an approximately cylindrical segment, each segment overlapping on its ends another two segments (50, 45) coupled in rectangular channels (43) of the ends of the blade (45); and its covers (20, 21), each include, at the level of the housing (22) of the stator for the spark plug (18, 19), small recesses (Not

Numbered) communicating the chambers (A) adjacent to each blade (9) when the latter passes by a spark plug (See Figures 4-5, 7-10, and 12-23, and Column 3, lines 5-51).

It would has been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized the structural details of the blades and small recesses communicating the chambers adjacent to each blade when the latter passes by a spark plug, as taught by Hunter, to improve the efficiency of the Alessandri device, since the use thereof would have prevented the back flow and leaking around the vanes.

Response to Arguments

Applicant's arguments filed on April 09, 2007 have been fully considered but they are not persuasive. Therefore, Claims 1-5 are pending.

With regard to the Applicant's arguments set forth on Pages 12-13, applicant states that : "the rotor design with 8 working chambers allows reaching a 23 to 1 compression ratio, which is far greater than what can be obtained with the devices disclosed in the cited references, which have only 4 working chambers every 360° of rotation."

The examiner respectfully disagrees with the applicant, because:

First of all, Alessandri/ Drehkoben-Kraftmashinen/ Crutchfield/ Holdampf does disclose eight vanes, which divide the working chamber into 8 working chambers sections.

Secondly, the features upon which applicant relies (i.e., the rotor design with 8 working chambers allows reaching a 23 to 1 compression ratio) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Finally, the recitation of "such that the retraction movement of part of them is combined with the ejection movement of the others in order for the mechanical relationship existing between them to determine that the same are kept in permanent contact with the inner wall of the stator" is considered as the functional language. Alessandri/ Drehkoben-Kraftmashinen/ Crutchfield/ Holdampf discloses all the structural components of an engine system, which are read on those of the instant invention. Therefore, the Alessandri/ Drehkoben-Kraftmashinen/ Crutchfield/ Holdampf system is capable of performing the same desired functions as the instant invention having been claimed in claim 1.

Therefore, it is believed that the rejections of claims 1-5 are sustained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TTB
May 09, 2007

Thai-Ba Trieu
Primary Examiner
Art Unit 3748